

## Midwest Ag-Focus Climate Outlook

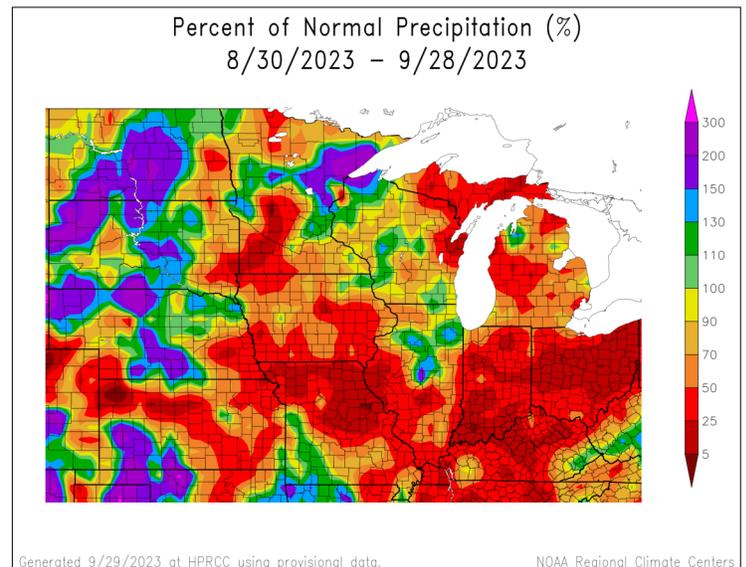
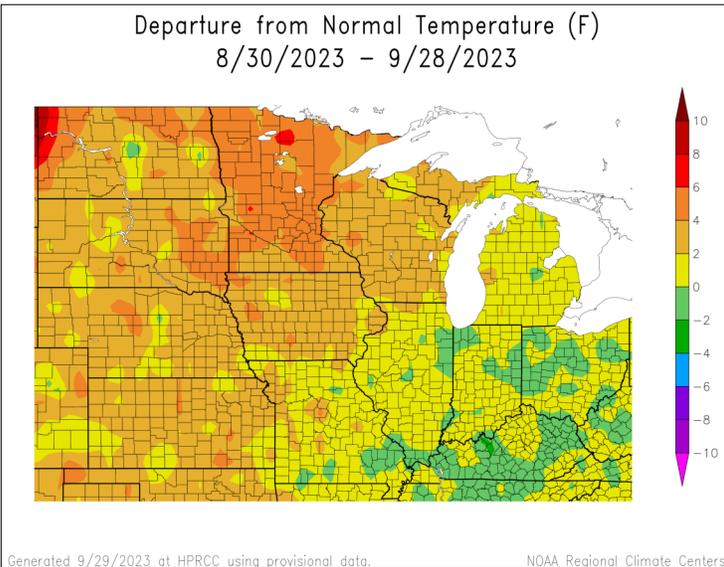
### Main Points



- ◆ Drought conditions have worsened with lower-than-normal precipitation across much of the Corn Belt, apart from isolated areas of heavier rainfall.
- ◆ Compared to the 5-year average, corn and soybean progress is ahead in the western states and behind in the east, with winter wheat planting nearly on track.
- ◆ Fire potential is prevalent with the dry soils, dry vegetation, low precipitation with warmer temperatures, and equipment operating in the fields.
- ◆ October looks to be warmer-than-normal for most of the region, with the northern states seeing equal chances for precipitation – except upper Michigan – and the southern states potentially seeing above-normal precipitation. The Climate Prediction Center will update its monthly outlook in the next few days.



### Current Conditions



Over the last month, Michigan, Ohio, Indiana, Southern Illinois, and Missouri have joined Iowa, Wisconsin, and Minnesota with below normal precipitation. A vast majority of these states are covered in below normal precipitation, with isolated areas of less than 5% of normal precipitation. However, there are pockets of above normal precipitation, most notably in the Duluth, MN area nearing 10" for the month of September. Meanwhile, the Great Plains covers the entire spectrum of percent of normal precipitation, from 5% to 300%. In terms of temperature departures over the past 30 days, a rather pronounced southeast-northwest gradient was present. The eastern half was mostly 1-2°F below normal, with a few 3°F departures in the far southern areas. On the flip side, the western half experienced temperatures 1-5°F above normal, with the largest departures in Minnesota and the Dakotas.

Images from High Plains Regional Climate Center (HPRCC), Online Data Services: [ACIS Climate Maps](https://www.climatehubs.usda.gov/hubs/midwest). Generated: 9/29/2023.



Impacts

Drought has remained an issue over the last month, with large areas of 1 to 2 class degradations matching up with the areas that saw very little precipitation compared to normal. The isolated areas of drought improvement correlate to the heavier pockets of rainfall. Soil moisture conditions improved slightly for the western states and worsened for the eastern states, contributing to the persistent drought issues. Iowa continues to set a record at containing D1 or worse for over 160 weeks. Additionally, Iowa saw its first D4 conditions since 2012, and Wisconsin saw its first D4 conditions since the inception of the United States Drought Monitor in 2000.

Crops and Livestock

Harvest started this past month in areas with rapid maturity and dry-down, with corn harvest slightly ahead of soybeans. Corn and soybean conditions have been a mixture of worsened and improved between the states with more and less intensive drought conditions. Overall, corn and soy progress continued to be slower than average in the eastern states. Winter wheat seeding has started in the Plains and even some of our eastern states. However, dry soils continue to be a problem for fall seeding of winter grains and cover crops.

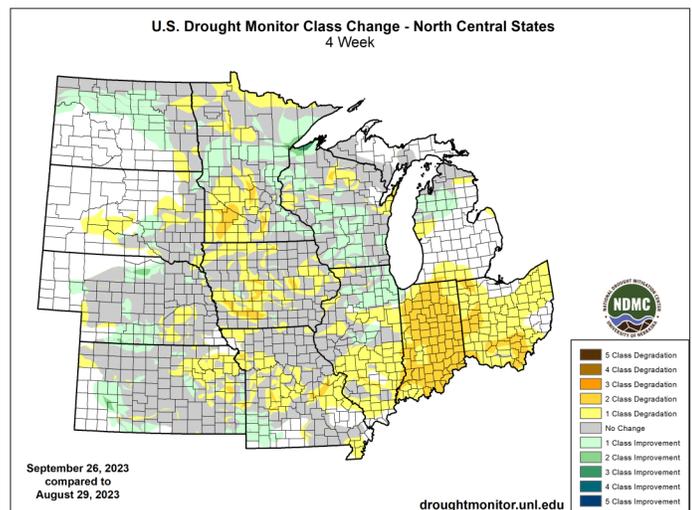
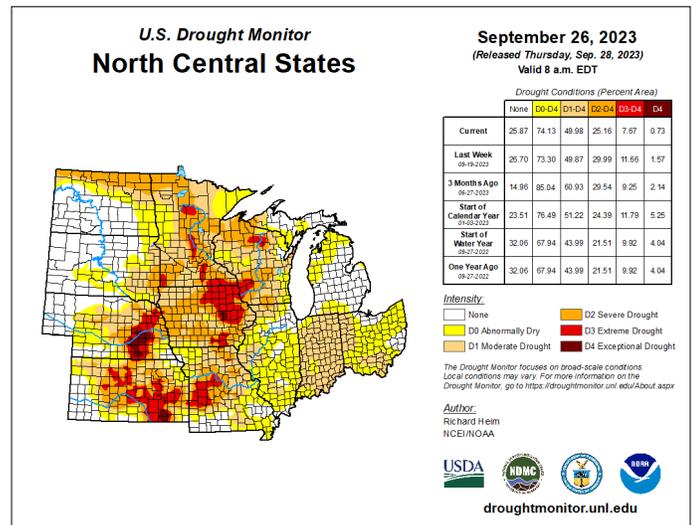
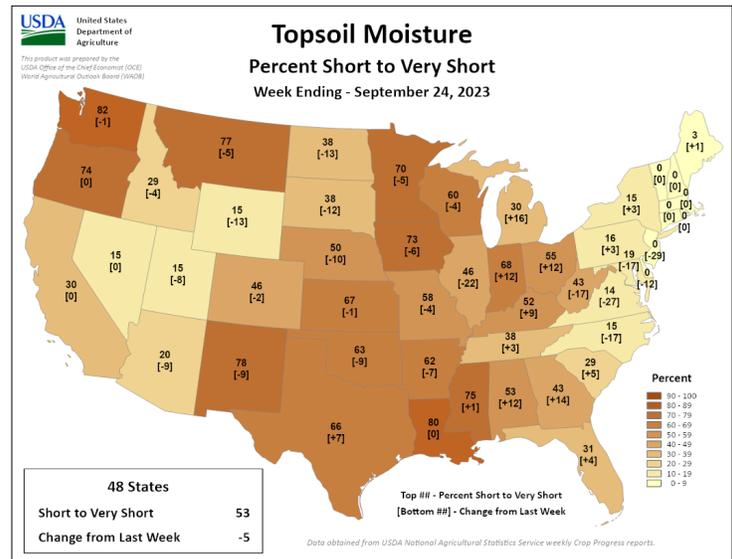
Various reports of livestock losses have coincided with the heat events in mid-August and around Labor Day. Numbers have been difficult to determine, but the losses have been noteworthy.

Fire

The outlook from the NIFC shows that the upper Midwest has an above normal fire potential for the month of October, with the rest of the Corn Belt at a normal level of risk. Current conditions contributing to fire potential are the dry soils and vegetation along with the forecasted moderate, but above normal temperatures and little precipitation. Operating combines during fire potential conditions heightens the risk for field fires, and high winds contribute to the fast spread of fires.

Mississippi River

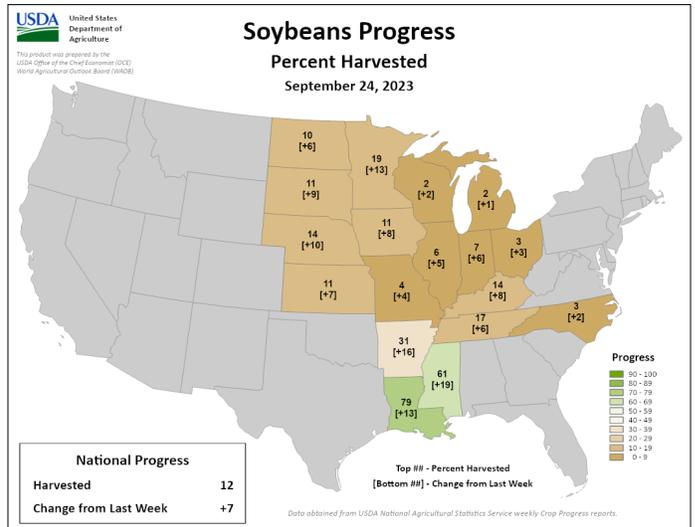
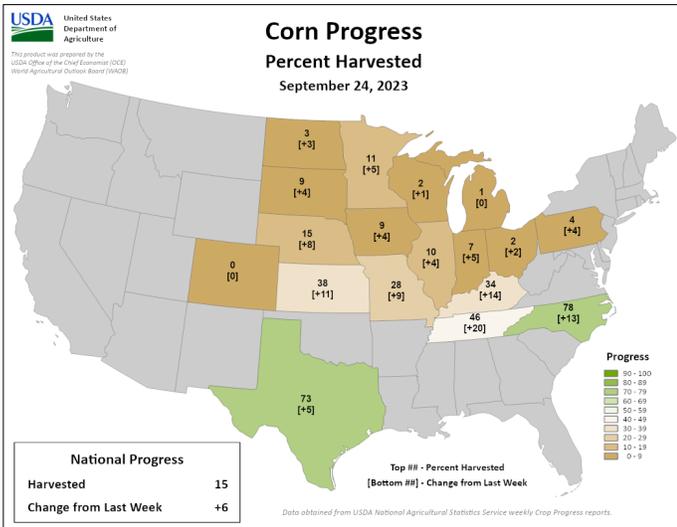
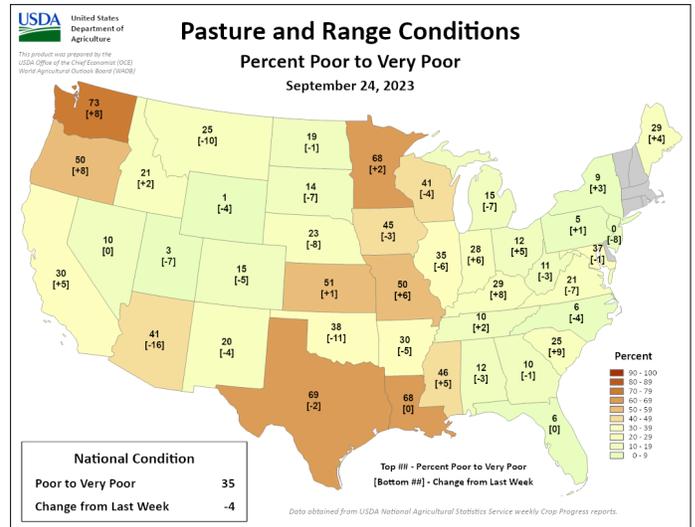
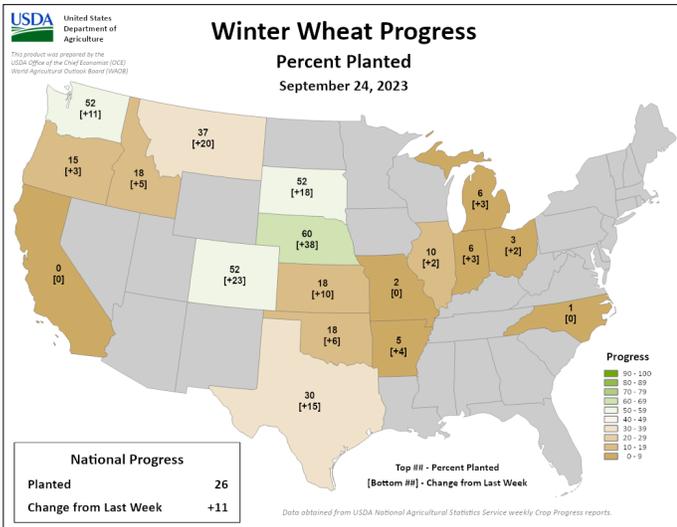
With the widespread drought in the Mississippi, Missouri, and Ohio River Basins, lower Mississippi River flow problems remain a concern for grain transportation to export. Extended periods of drought and more widespread severe issues have added to the problem.



Maps Generated by the [United States Department of Agriculture](https://www.usda.gov), [National Drought Mitigation Center](https://www.ndmc.gov) and the [Short-term Prediction Research and Transition Center](https://www.sprc.org).



For more information, please visit:  
<https://www.climatehubs.usda.gov/hubs/midwest>

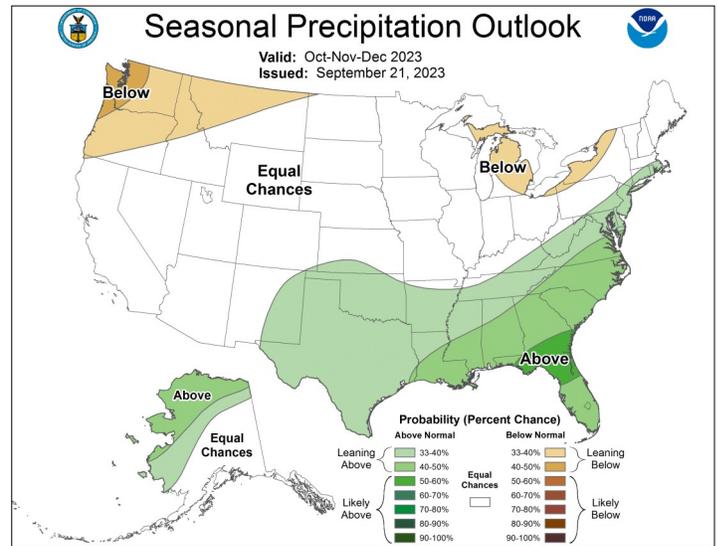
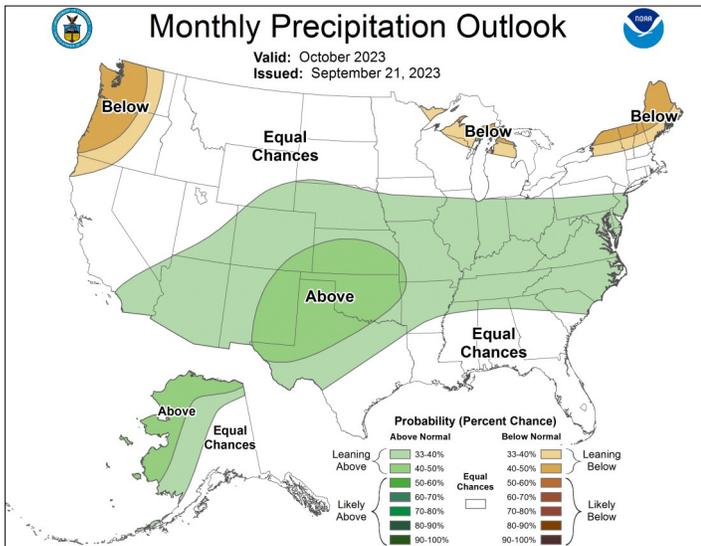
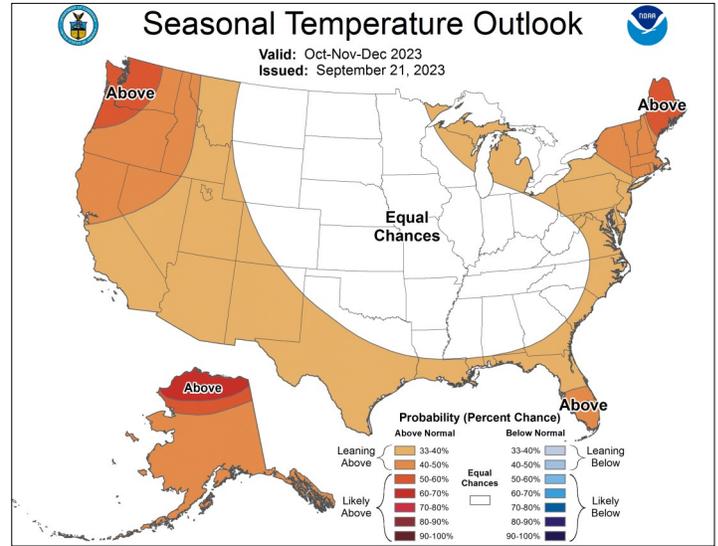
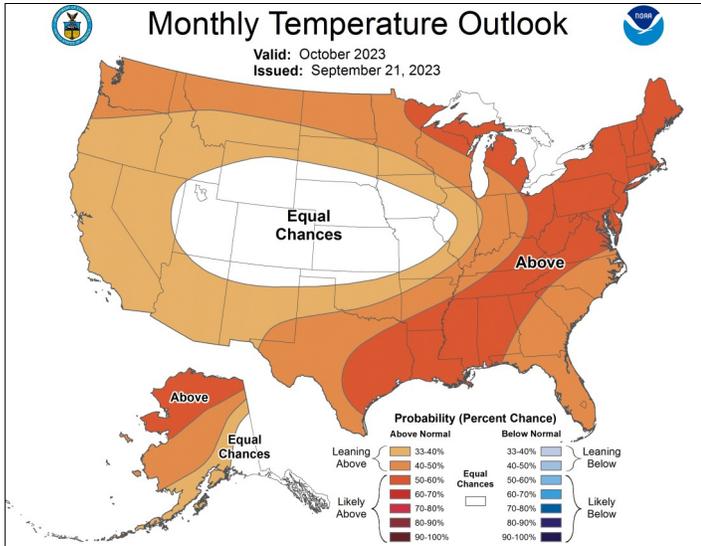


Maps generated by the United States Department of Agriculture and are now available on a National Drought Mitigation Center [webpage](https://www.ndmc.gov).

**Outlook** 

Going into the first week of October, the 8-14-day outlook indicates that temperatures very likely will be above normal for the eastern and central portions of the Corn Belt, while the probability of warmer-than-average temperatures tapers off across the Great Plains. Precipitation over the next 8-14 days is leaning below normal for Ohio and eastern Kentucky, near normal for Michigan, Indiana, and western Kentucky, and above normal for the western half of the region. The 30-day temperature outlook displays an east-west gradient across the Corn Belt. The far eastern portion of the region will very likely be above normal for the month, but the likelihood weakens moving to the west, where the western portion sees equal chances. While the start of October will likely see above normal temperatures across the region, it is possible that there will be a mid-month transition to cooler weather as atmospheric patterns shift and advect the colder, Canadian air into the Corn Belt. Over the next month, the outlook suggests that the northern states see equal chances for precipitation, with upper Michigan hinting at below normal conditions, whereas the southern states will potentially see above normal precipitation. As the atmospheric patterns shift later in the month, the above normal precipitation may extend further north into the Corn Belt. The 90-day outlook begins to show us El Niño-esque cold-season behaviors, where overall, the Midwest and Great Plains are typically drier and temperatures milder. The December-January-February outlook also shows the typical El Niño pattern across the US, suggesting a mild winter for the Corn Belt. However, smaller-scale atmospheric patterns can overcome the large-scale patterns from time-to-time.

Brief harvest slowdowns are possible due to precipitation, but precipitation is welcomed from a drought and soil moisture revival perspective. Despite recent precipitation, fall seeding issues may still occur. Although, seed germination does not take a large amount of moisture. Early October warmth will likely slow the cooling of soil temperatures and likely delay first freeze, so account for this in any fall management decisions. If you'd like a closer look at freeze dates for your area, check out the [MRCC Freeze Date Tool](#).



Outlooks provided by the [Climate Prediction Center](#).

**Partners and Contributors**



- [United States Department of Agriculture \(USDA\)](#)
- [National Oceanic and Atmospheric Administration \(NOAA\)](#)
- [Climate Prediction Center \(CPC\)](#)
- [National Weather Service \(NWS\)](#)
- [National Center for Environmental Information \(NCEI\)](#)

- [National Drought Mitigation Center \(NDMC\)](#)
- [National Integrated Drought Information System \(NIDIS\)](#)
- [Midwestern Regional Climate Center \(MRCC\)](#)
- [Midwest State Climatologists](#)
- [High Plains Regional Climate Center \(HPRCC\)](#)



**For More Information**

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For more information, please visit:  
<https://www.climatehubs.usda.gov/hubs/midwest>